



FS Flow Switch

41593 Winchester Rd. #200, Temecula, CA. 92590

Tel: 951.526.2239

Fax: 951.526.2441

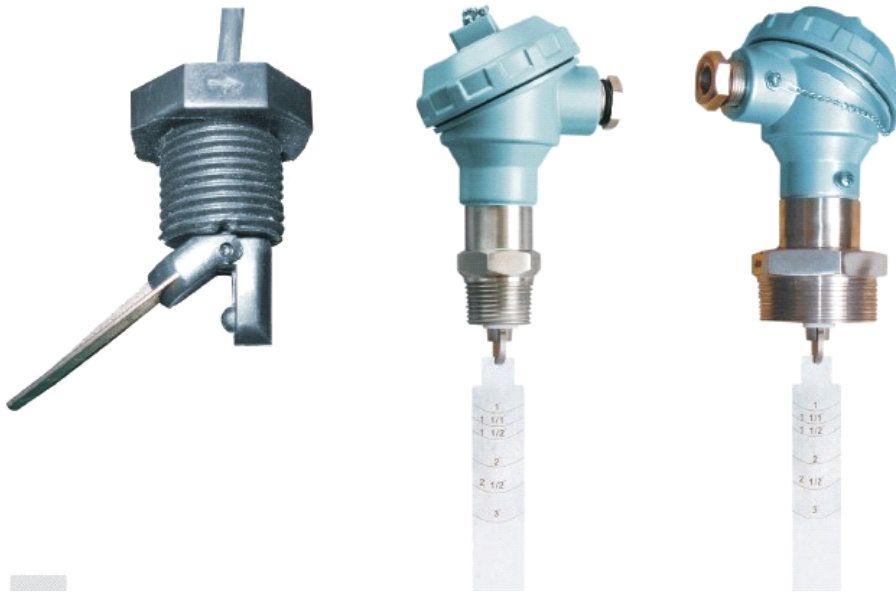
Email: sales@srsintldirect.com

<https://www.srsintldirect.com>

Product Description

Vane type of Flow Switch utilizes the flow rate of water to drive the vane to test whether the liquid in the tube/vessel flows or not. When the liquid in the tube/vessel does not flow, the spring presses the magnet and make the vane vertical, at this moment, the spring switch has no operation, the contact point is at “NO” state. When the liquid flows in the tube/vessel and the flow is big enough to crash the vane higher to 20 to 30 degree, eccentric strap drive above the vane push the magnet upward, suction force of magnet make the magnetic spring switch operate, while the contact point is connected, the length of vane changes due to the diameter of pipe.

Product Pictures



Product Parameters

Model	SRS-10	SRS-20
Housing Material	SUS304, Exd IIBT4	Aluminum Alloy, IP65
Operation Temp.	-30 degree to 130 degree	-30 degree to 150 degree
Operation Parts	Teflon, SU304	Teflon, SU304
Operation Pressure	Max, 2000PSIG	Max, 2000PSIG
Pressure Drop Allowance	3PSIG	3PSIG
Set Point Tolerance	±25%	±25%
Repeatability Tolerance	±5%	±5%
Contact Capacity	40W/230VAC SPDT	40W/230VAC SPDT

Diagram of Flow Controlled Range

specification length	1"		1-1/4"		1-1/2"	
	ACT	DEACT	ACT	DEACT	ACT	DEACT
1"	5	4	85	65	12	9
1-1/4"			65	45	9	7
1-1/2"					14	10
2"						
2-1/2"						
3"						

specification length	2"		2-1/2"		3"	
	ACT	DEACT	ACT	DEACT	ACT	DEACT
1"	17	15				
1-1/4"	15	12	23	20		
1-1/2"	23	16	32	25		
2"	18	12	24	17	33	27
2-1/2"			20	13	22	27
3"					22	16

Installation Method

- ◆ The length of vane decides the position of the operating point. Firstly, determine the length of vane according to the pipe size and the expected position of operating point. Make some mark on the vane and cut the vane. (Users also can cut the length in no-mark place according to specific requirement.)
- ◆ The plane of vane should be installed with section of pipe in parallel and fixed on the end of thread.
- ◆ Make sure that the "FLOW" mark on the product must be parallel with catheter when the installation finished. (The pipe of flow circuiting must be horizontal.)
- ◆ When the float switch needs to fix on the T contactor, it must be enlaced with leaking-proof belt and locked on the end of thread.

Installation Attention

- ◆ Clean the pollutions by tested liquid timely as too much pollution may affect the operation of vane.
- ◆ Do not exceed the pressure and temperature limit marked on the catalogue. If the tested liquid burst out instant pressure or temperature, we should also consider it seriously.

Remark: Manufacture customized is available for this product.

Installation Guide

- ◆ Installation place should be far from water inlet, otherwise the switch may wrongly operate due to the vibration of water.
- ◆ If the switch fixed in the area of stirring, it is better to install wave cutter of wave cutter board.
- ◆ The inner diameter of pipe should be larger than the largest size of flow switch to make sure that the operation of vane couldnot be blocked.
- ◆ Be suggested to select multi-core cable of 8mm diameter.
- ◆ Load of controlled circuit must match contact capacity of flow switch.
- ◆ Tested liquid cannot contain magnetic powder such as iron scrap.
- ◆ The operating point of switch has been regulated before factory delivery according to client's requirement. Please do not regulate the switch leisurely.
- ◆ Please note that the arrow direction of octagon nut should be the same as the direction of water flow.

Protection of Contact Point

◆ When the flow switch is used inductive load circuit of motor, relay and solenoid coil, it is suggested to add shunt circuit to protect the two sides of the load, for example: relay, RC (buffer), rheostat and diode etc.

Note: Do NOT connect the flow switch with electromagnetic valve, motor and electromagnetic switch.

◆ When the float switch is used in capacitive load circuit of capacitance, red-hot light, long cable, there is a upsurge current in contact of switch; it is suggested to add shunt circuit to protect the two sides of float switch, such as limit flow resistor or surge absorber .

Regular Failures and Troubleshooting

No.	Malfunction	Analysis	Troubleshooting
1	no operation of switch	◆ flow rate is below vane bounce ◆ the vane is broken ◆ vane is blocked by some substance	reconfirm the bounce contact us to replace the vane eliminate the substance
2	switch has operation but no Signal output	◆ shift of vane ◆ magnetic switch broken	regulate vane position replace magnetic switch
3	abnormal output signal	magnetic interfere	eliminate magnetic interfere
4.	keep signal, cannot reset	switch is blocked by some substance	eliminate the substance
5	two output signal from one point	switch component is broken	contact us to replace the float

Wiring and Contact Point

Three ways of Switch contact point:

① 1A: A-C contact when there is flow

② 1B: B-C contact when there is flow

③ AB: A-C cut when there is flow, and B-C contact;

A-C contact when there is not flow, and B-C cut;

Normally, no instruction indicated and press switch to contact the circuit directly.

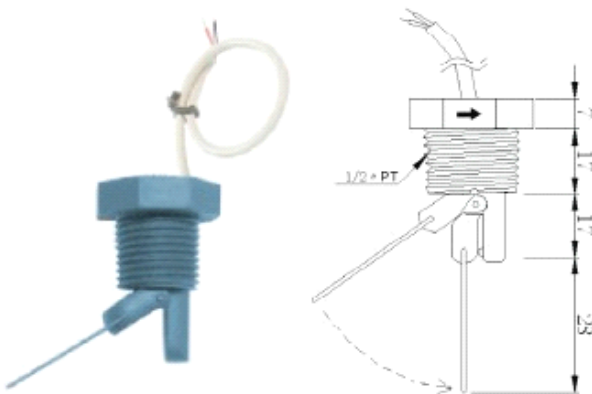
Daily Maintenance

◆ Clean the dust on the switch timely (the period depends on the medium)

◆ Check the vane whether it is loosen or fallen off

Simple Type of Flow Switch FS-P

Product Picture



Simple Type of Flow Switch FS-P

Product Parameters

◆ Material: PP adding fibre

◆ Temperature: -20°C~80°C

◆ Pressure Resistance: 50W/240VAC, 200VDC

◆ Contact Capacity: 1.0Mpa

◆ Max. Shifting Current: 0.5A

◆ Max. Working Current: 1A

◆ Insulation Resistance: $\geq 100 M\Omega$

◆ Switch Mode: SPST (NO)

◆ Usage Time: $\geq 5 \times 10^7$ times